

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	10/03/2018 10/03/2018	Bob Duffey

LM Start		Rating **	A	Issue No.	2
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals			°	°
DWR ID	DWR_ST0009_01_s_2013_2				
Comment Code					
Inspector Comment					
Sutter Yard has the O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	4
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment			°	°
DWR ID	DWR_ST0009_01_s_2013_4				
Comment Code					
Inspector Comment					
Sutter Yard has a stockpile of emergency supplies and equipment.					

No Photos

LM Start		Rating **	A	Issue No.	5
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Flood Preparedness & Training			°	°
DWR ID	DWR_ST0009_01_s_2013_5				
Comment Code					
Inspector Comment					
Sutter Yard had flood fight training October 2018.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Unit No. 01 Tisdale Bypass	Left	4.51	10/03/2018 10/03/2018	Bob Duffey

LM Start	0.02	Rating **	A	Issue No.	11
LM End	0.71	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.027172°	39.028325°
				-121.821437°	-121.808907°
DWR ID	DWR_ST0009_01_f_2018_11				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
The vegetation was removed from the landside slope.					

Photo 1 of 1 : FA_2018_ST0009_286_11_20181008_00019.jpg



View of the removed vegetation from the landside slope.

LM Start	0.02	Rating **	A	Issue No.	10
LM End	4.50	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.027172 °	39.032885 °
				-121.821437 °	-121.743387 °
DWR ID	DWR_ST0009_01_f_2018_10				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
The vegetation was mowed or burned along the waterside slope.					

Photo 1 of 2 : FA_2018_ST0009_286_10_20181114_00024.jpg



View of the mowed or burned vegetation along the waterside slope.

LM Start	0.02	Rating **	A	Issue No.	10 (cont)
LM End	4.50	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2018_ST0009_286_10_20181008_00020.jpg



View of the vegetation along the waterside slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Unit No. 01 Tisdale Bypass	Left	4.51	10/03/2018 10/03/2018	Bob Duffey

LM Start	0.71	Rating **	A	Issue No.	15
LM End	1.44	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.028325 °	39.028257 °
				-121.808907 °	-121.795252 °
DWR ID	DWR_ST0009_01_f_2018_15				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
The vegetation was mowed or burned along the landside slope.					

Photo 1 of 1 : FA_2018_ST0009_286_15_20181008_00021.jpg



View of the vegetation along the landside slope.

LM Start	2.00	Rating **	A	Issue No.	16
LM End	4.50	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.028183 °	39.032885 °
				-121.785020 °	-121.743387 °
DWR ID	DWR_ST0009_01_f_2018_16				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
The vegetation was burned or mowed along the landside slope.					

Photo 1 of 2 : FA_2018_ST0009_286_16_20181114_00023.jpg



View of the burned or mowed vegetation along the landside slope.

LM Start	2.00	Rating **	A	Issue No.	16 (cont)
LM End	4.50	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2018_ST0009_286_16_20181008_00022.jpg



View of the vegetation along the landside slope.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

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Unit No. 01 Tisdale Bypass	Left	4.51	10/03/2018 10/03/2018	Bob Duffey

LM Start	2.14	Rating **	A/W	Issue No.	25
LM End	2.14	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.028132 °	39.028132 °
				-121.782389 °	-121.782389 °
DWR ID	16591				
Comment Code					
Inspector Comment					
FS_ID:51484 DS_ID:16591 EP_NO: 10099 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 4/10/2017 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)10/11/2016 Crossing appears to be in good conditon.(DWR Sutter Yard - a Freitag)4/18/2016 Crossing appears to be in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection. FIELD_STRUCT_DESC: 1 of 2: 4-foot by 7-foot reinforced concrete discharge tunnel through the levee, 38 feet below the crown. Slide gate in 4-foot by 15-foot concrete well on the waterside (WS) slope. Pump house located on the landside (LS) toe and wooden flap gates on the WS toe. (two 4-foot by 7-foot tunnel [HLM 2.13] authorized under Automatic Board Order (ABO) issued as Permit No. 10099, 1955 - Reclamation District No. 1660). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 133, August 1955 (Station 1044+60)]. FS Date: 4/12/2017 9:20:05 AM					

LM Start	2.14	Rating **	A/W	Issue No.	25 (cont)
LM End	2.14	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2018_51484_64226.jpg



Slide gates on WS shoulder.

Photo 2 of 3 : UCIP_FA_2018_51484_64225.jpg



Wooden Flap gates on WS toe.

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	10/03/2018 10/03/2018	Bob Duffey

LM Start	2.14	Rating **	A/W	Issue No.	25 (cont)	
LM End	2.14	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.028132 °	39.028132 °	
				-121.782389 °	-121.782389 °	
DWR ID	16591					
Comment Code						
Inspector Comment						
FS_ID:51484 DS_ID:16591 EP_NO: 10099 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 4/10/2017 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)10/11/2016 Crossing appears to be in good conditon.(DWR Sutter Yard - a Freitag)4/18/2016 Crossing appears to be in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection. FIELD_STRUCT_DESC: 1 of 2: 4-foot by 7-foot reinforced concrete discharge tunnel through the levee, 38 feet below the crown. Slide gate in 4-foot by 15-foot concrete well on the waterside (WS) slope. Pump house located on the landside (LS) toe and wooden flap gates on the WS toe. (two 4-foot by 7-foot tunnel [HLM 2.13] authorized under Automatic Board Order (ABO) issued as Permit No. 10099, 1955 - Reclamation District No. 1660). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 133, August 1955 (Station 1044+60)]. FS Date: 4/12/2017 9:20:05 AM						

Photo 3 of 3 : UCIP_FA_2018_51484_64224.jpg



Pump house on LS toe.

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	10/03/2018 10/03/2018	Bob Duffey

LM Start	2.14	Rating **	A/W	Issue No.	26
LM End	2.14	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.028124 °	39.028124 °
				-121.782344 °	-121.782344 °
DWR ID	16856				
Comment Code					
Inspector Comment					
FS_ID:51485 DS_ID:16856 EP_NO: 10099 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 4/10/2017 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)10/11/2016 Crossing appears to be in good condition.(DWR Sutter Yard - a Freitag)4/18/2016 Crossing appears to be in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection. FIELD_STRUCT_DESC: 2 of 2: 4-foot by 7-foot concrete discharge tunnel through the levee, 38 feet below the crown. Slide gate in 4-foot by 15-foot concrete well on the waterside (WS) slope. Pump house located on the landside (LS) toe and wooden flap gates on the WS toe. (two 4-foot by 7-foot tunnel [HLM 2.13] authorized under Automatic Board Order (ABO) issued as Permit No. 10099, 1955 - Reclamation District No. 1660). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 133, August 1955 (Station 1044+60)]. FS Date: 4/12/2017 9:20:37 AM					

LM Start	2.14	Rating **	A/W	Issue No.	26 (cont)
LM End	2.14	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2018_51485_64230.jpg



Slide gates on WS shoulder.

Photo 2 of 3 : UCIP_FA_2018_51485_64229.jpg



Wooden flap gates on WS toe.

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	10/03/2018 10/03/2018	Bob Duffey

LM Start	2.14	Rating **	A/W	Issue No.	26 (cont)
LM End	2.14	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.028124°	39.028124°
				-121.782344°	-121.782344°
DWR ID	16856				
Comment Code					
Inspector Comment					
FS_ID:51485 DS_ID:16856 EP_NO: 10099 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 4/10/2017 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)10/11/2016 Crossing appears to be in good condition.(DWR Sutter Yard - a Freitag)4/18/2016 Crossing appears to be in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection. FIELD_STRUCT_DESC: 2 of 2: 4-foot by 7-foot concrete discharge tunnel through the levee, 38 feet below the crown. Slide gate in 4-foot by 15-foot concrete well on the waterside (WS) slope. Pump house located on the landside (LS) toe and wooden flap gates on the WS toe. (two 4-foot by 7-foot tunnel [HLM 2.13] authorized under Automatic Board Order (ABO) issued as Permit No. 10099, 1955 - Reclamation District No. 1660). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 133, August 1955 (Station 1044+60)]. FS Date: 4/12/2017 9:20:37 AM					

Photo 3 of 3 : UCIP_FA_2018_51485_64228.jpg



Pump house on LS toe.

LM Start	2.16	Rating **	U	Issue No.	12
LM End	2.16	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			39.028137°	39.028137°
				-121.782020°	-121.782020°
DWR ID	DWR_ST0009_01_f_2016_12				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 2 : FA_2018_ST0009_286_12_20180905_00002.jpg



View of a rodent hole along the levee crown.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Unit No. 01 Tisdale Bypass	Left	4.51	10/03/2018 10/03/2018	Bob Duffey

LM Start	2.16	Rating **	U	Issue No.	12 (cont)	
LM End	2.16	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			39.028137 °		39.028137 °
				-121.782020 °		-121.782020 °
DWR ID	DWR_ST0009_01_f_2016_12					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						

Photo 2 of 2 : FA_2018_ST0009_286_12_20180905_00003.jpg



Another view of the rodent holes along the crown and landside slope.

LM Start	4.35	Rating **	M	Issue No.	24
LM End	4.35	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.030637 °	39.030637 °
				-121.743023 °	-121.743023 °
DWR ID	DWR_ST0009_01_s_2017_24				
Comment Code					
DE : Debris					
Inspector Comment					
Remove the debris from the waterside slope and toe.					

Photo 1 of 1 : FA_2018_ST0009_286_24_20180905_00004.jpg



View of the debris along the waterside slope and toe.

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LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

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+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
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Sutter Maintenance Yard Tisdale Bypass

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Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	10/03/2018 10/03/2018	Bob Duffey

LM Start	1.14	Rating **	M	Issue No.	13
LM End	1.14	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.025460 °	39.025460 °
				-121.800022 °	-121.800022 °
DWR ID	DWR_ST0009_02_f_2016_13				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Erosion around the WS concrete vault.					

Photo 1 of 2 : FA_2018_ST0009_287_13_20180905_00007.jpg



View of the erosion along the concrete vault.

LM Start	1.14	Rating **	M	Issue No.	13 (cont)
LM End	1.14	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2018_ST0009_287_13_20180905_00008.jpg



Another view of the erosion along the concrete vault.

LM Start	1.19	Rating **	A/W	Issue No.	290
LM End	1.19	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.025490 °	39.025490 °
				-121.799240 °	-121.799240 °
DWR ID	DWR_ST0009_02_s_2015_290				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Sutter Yard needs to monitor the erosion along the berm.					

Photo 1 of 1 : FA_2018_ST0009_287_290_20180905_00010.jpg



View of the erosion along the waterside berm.

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	10/03/2018 10/03/2018	Bob Duffey

LM Start	4.09	Rating **	A/W	Issue No.	18
LM End	4.09	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.024912 °	39.024912 °
				-121.745237 °	-121.745237 °
DWR ID	DWR_ST0009_02_f_2017_18				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Repair the erosion along the water side berm.					

Photo 1 of 1 : FA_2018_ST0009_287_18_20180905_00009.jpg



View of the erosion along the waterside berm.

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